

**REMARKS/ARGUMENTS**

Reconsideration of this application and entry of the foregoing amendment are respectfully requested.

The specification has been amended to include the Sequence Listing submitted herewith on separate sheets. Applicants submit that entry of the Sequence Listing does not raise the issue of new matter. The computer readable copy of the Sequence Listing submitted herewith is the same as the attached paper copy of that Listing.

This application is submitted to be in condition for allowance and a Notice to that effect is requested.

Respectfully submitted,

**NIXON & VANDERHYE P.C.**

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**Notice to Comply**

Application No.  
10568691

Applicant(s)  
BAWDEN ET AL.

Examiner  
Alana M. Harris, Ph.D.

Art Unit  
1643

**NOTICE TO COMPLY WITH REQUIREMENTS FOR PATENT APPLICATIONS CONTAINING  
NUCLEOTIDE SEQUENCE AND/OR AMINO ACID SEQUENCE DISCLOSURES**

Applicant must file the items indicated below within the time period set the Office action to which the Notice is attached to avoid abandonment under 35 U.S.C. § 133 (extensions of time may be obtained under the provisions of 37 CFR 1.136(a)).

The nucleotide and/or amino acid sequence disclosure contained in this application does not comply with the requirements for such a disclosure as set forth in 37 C.F.R. 1.821 - 1.825 for the following reason(s):

- ☒ 1. This application clearly fails to comply with the requirements of 37 C.F.R. 1.821-1.825. Applicant's attention is directed to the final rulemaking notice published at 55 FR 18230 (May 1, 1990), and 1114 OG 29 (May 15, 1990). If the effective filing date is on or after July 1, 1998, see the final rulemaking notice published at 63 FR 29620 (June 1, 1998) and 1211 OG 82 (June 23, 1998).
- ☒ 2. This application does not contain, as a separate part of the disclosure on paper copy, a "Sequence Listing" as required by 37 C.F.R. 1.821(c).
- ☒ 3. A copy of the "Sequence Listing" in computer readable form has not been submitted as required by 37 C.F.R. 1.821(e).
- ☐ 4. A copy of the "Sequence Listing" in computer readable form has been submitted. However, the content of the computer readable form does not comply with the requirements of 37 C.F.R. 1.822 and/or 1.823, as indicated on the attached copy of the marked -up "Raw Sequence Listing."
- ☐ 5. The computer readable form that has been filed with this application has been found to be damaged and/or unreadable as indicated on the attached CRF Diskette Problem Report. A Substitute computer readable form must be submitted as required by 37 C.F.R. 1.825(d).
- ☐ 6. The paper copy of the "Sequence Listing" is not the same as the computer readable form of the "Sequence Listing" as required by 37 C.F.R. 1.821(e).
- ☐ 7. Other:

**Applicant Must Provide:**

- ☒ An initial or substitute computer readable form (CRF) copy of the "Sequence Listing".
- ☒ An initial or substitute paper copy of the "Sequence Listing", as well as an amendment specifically directing its entry into the application.
- ☒ A statement that the content of the paper and computer readable copies are the same and, where applicable, include no new matter, as required by 37 C.F.R. 1.821(e) or 1.821(f) or 1.821(g) or 1.825(b) or 1.825(d).

For questions regarding compliance to these requirements, please contact:

For Rules Interpretation, call (571) 272-0731 or (571) 272-0951

For CRF Submission Help, call (571) 272-2510

PatentIn Software Program Support

Technical Assistance. 1-866-217-9197 or 703-305-3028 or 571-272-6845

PatentIn Software is Available At [www.USPTO.gov](http://www.USPTO.gov)

**PLEASE RETURN A COPY OF THIS NOTICE WITH YOUR REPLY**

/Alana M. Harris, Ph.D./  
Primary Examiner, Art Unit 1643



SEQUENCE LISTING

<110> Chroma Therapeutics Limited

Bawden, Lindsay J

Bone, Elizabeth A

Drummond, Alan H

Needham, Lindsey A

<120> Detection of Histone Modification in Cell-free Nucleosomes

<130> NRSCP6244818

<140> PCT/GB2004/003564

<141> 2004-08-18

<150> GB 0319376.0

<151> 2003-08-18

<160> 16

<170> PatentIn version 3.1

<210> 1

<211> 8

<212> PRT

<213> Homo sapiens

<220>

<223> Example of peptide which may be used to generate modified histone specific antibodies: H3 lys 4 (Me)

<220>

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<222> (4)..(4)

<223> METHYLATION

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<212> PRT

<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone  
specific antibodies: H4 arg 3 (Me)

<220>

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1 5

<210> 3

<211> 5

<212> PRT

<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone

specific antibodies: H4 lys 5 (Ac)

<220>

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<223> ACETYLATION

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Ser Gly Arg Gly Lys  
1 5

<210> 4

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<212> PRT

<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone  
specific antibodies: H4 arg 3 (Me)/lys 5 (Ac)

<220>

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<222> (3)..(3)

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<223> ACETYLATION

<400> 4

Ser Gly Arg Gly Lys  
1 5

<210> 5

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<212> PRT

<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone  
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<220>

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<222> (1)..(1)

<223> PHOSPHORYLATION

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<223> METHYLATION

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<223> ACETYLATION

<400> 5

Ser Gly Arg Gly Lys  
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<210> 6

<211> 9

<212> PRT

<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone  
specific antibodies: H3 lys 9 (Me)

<220>

<221> MOD\_RES

<222> (5)..(5)

<223> METHYLATION

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Gln Thr Ala Arg Lys Ser Thr Gly Val  
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<210> 7

<211> 11

<212> PRT

<213> Homo sapiens

<220>

<223> Example of peptide which may be used to generate modified histone  
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<220>

<221> MOD\_RES

<222> (9)..(9)

<223> PHOSPHORYLATION

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<210> 8

<211> 10

<212> PRT

<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone specific antibodies: H3 lys 27 (Me)

<220>

<221> MOD\_RES

<222> (4)..(4)

<223> METHYLATION

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<210> 9

<211> 11

<212> PRT

<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone specific antibodies: H3 lys 36 (Me)

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<223> METHYLATION

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<212> PRT

<213> Homo sapiens

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<223> Example of peptide which may be used to generate modified histone specific antibodies: H4 lys 20 (Me)

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<210> 11

<211> 135

<212> PRT

<213> Homo sapiens

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Ala Arg Thr Lys Gln Thr Ala Arg Lys Ser Thr Gly Gly Lys Ala Pro  
1 5 10 15

Arg Lys Gln Leu Ala Thr Lys Ala Ala Arg Lys Ser Ala Pro Ala Thr  
20 25 30

Gly Gly Val Lys Lys Pro His Arg Tyr Arg Pro Gly Thr Val Ala Leu  
35 40 45

Arg Glu Ile Arg Arg Tyr Gln Lys Ser Thr Glu Leu Leu Ile Arg Lys  
50 55 60

Leu Pro Phe Gln Arg Leu Val Arg Glu Ile Ala Gln Asp Phe Lys Thr  
65 70 75 80

Asp Leu Arg Phe Gln Ser Ser Ala Val Met Ala Leu Gln Glu Ala Ser  
85 90 95

Glu Ala Tyr Leu Val Gly Leu Phe Glu Asp Thr Asn Leu Cys Ala Ile  
100 105 110

His Ala Lys Arg Val Thr Ile Met Pro Lys Asp Ile Gln Leu Ala Arg  
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Arg Ile Arg Gly Glu Arg Ala  
130 135

<210> 12

<211> 102

<212> PRT

<213> Homo sapiens

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1 5 10 15

Arg His Arg Lys Val Leu Arg Asp Asp Ile Gln Gly Ile Thr Lys Pro  
20 25 30

Ala Ile Arg Arg Leu Ala Arg Arg Gly Gly Val Lys Arg Ile Ser Gly  
35 40 45

Leu Ile Tyr Glu Glu Thr Arg Gly Val Leu Lys Val Phe Leu Glu Asn  
50 55 60

Val Ile Arg Asp Ala Val Thr Tyr Thr Glu His Ala Lys Arg Lys Thr  
65 70 75 80

Val Thr Ala Met Asp Val Val Tyr Ala Leu Lys Arg Gln Gly Arg Thr  
85 90 95

Leu Tyr Gly Phe Gly Gly  
100

<210> 13

<211> 129

<212> PRT

<213> Homo sapiens

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Ser Gly Arg Gly Lys Gln Gly Gly Lys Ala Arg Ala Lys Ala Lys Thr  
1 5 10 15

Arg Ser Ser Arg Ala Gly Leu Gln Phe Pro Val Gly Arg Val His Arg



<210> 15

<211> 142

<212> PRT

<213> Homo sapiens

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1 5 10 15

Arg Ser Ser Arg Ala Gly Leu Gln Phe Pro Val Gly Arg Val His Arg  
20 25 30

Leu Leu Arg Lys Gly His Tyr Ala Glu Arg Val Gly Ala Gly Ala Pro  
35 40 45

Val Tyr Leu Ala Ala Val Leu Glu Tyr Leu Thr Ala Glu Ile Leu Glu  
50 55 60

Leu Ala Gly Asn Ala Ala Arg Asp Asn Lys Lys Thr Arg Ile Ile Pro  
65 70 75 80

Arg His Leu Gln Leu Ala Ile Arg Asn Asp Glu Glu Leu Asn Lys Leu  
85 90 95

Leu Gly Gly Val Thr Ile Ala Gln Gly Gly Val Leu Pro Asn Ile Gln  
100 105 110

Ala Val Leu Leu Pro Lys Lys Thr Ser Ala Thr Val Gly Pro Lys Ala  
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Pro Ser Gly Gly Lys Lys Ala Thr Gln Ala Ser Gln Glu Tyr  
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<210> 16

<211> 135

<212> PRT

<213> Homo sapiens

<400> 16

Ala Arg Thr Lys Gln Thr Ala Arg Lys Ser Thr Gly Gly Lys Ala Pro  
1 5 10 15

Arg Lys Gln Leu Ala Thr Lys Ala Ala Arg Lys Ser Ala Pro Ser Thr  
20 25 30

Gly	Gly	Val	Lys	Lys	Pro	His	Arg	Tyr	Arg	Pro	Gly	Thr	Val	Ala	Leu	35	40	45
Arg	Glu	Ile	Arg	Arg	Tyr	Gln	Lys	Ser	Thr	Glu	Leu	Leu	Ile	Arg	Lys	50	55	60
Leu	Pro	Phe	Gln	Arg	Leu	Val	Arg	Glu	Ile	Ala	Gln	Asp	Phe	Lys	Thr	65	70	75
Asp	Leu	Arg	Phe	Gln	Ser	Ala	Ala	Ile	Gly	Ala	Leu	Gln	Glu	Ala	Ser	85	90	95
Glu	Ala	Tyr	Leu	Val	Gly	Leu	Phe	Glu	Asp	Thr	Asn	Leu	Cys	Ala	Ile	100	105	110
His	Ala	Lys	Arg	Val	Thr	Ile	Met	Pro	Lys	Asp	Ile	Gln	Leu	Ala	Arg	115	120	125
Arg	Ile	Arg	Gly	Glu	Arg	Ala										130	135	